Level 10 Unit 29.1

Measures of Central Tendency and the Range

Complete 3 pages (235 - 237) within 9 minutes with > 95% accuracy.

Time Taken:...... Total Score:.....

Example

Mean, median, and mode are <u>measures of central tendency</u>. What will be the mean, median, and mode of the given data? 25, 27, 26, 26, 23, 29, 26

Mean: Sum of all data divide by the number of all data items. We also call it the average.

Mean =
$$(25 + 27 + 26 + 26 + 23 + 29 + 26) \div 7$$

= $182 \div 7$
= 26

Median: The middle number of the data arranged in numerical order 23, 25, 26, 26, 26, 27, 29.

∴ The middle number is 26.

Mode: The number of that occurs most after in the data. 26 come 3 times.

∴ 26 is mode.

In case of median; if the data has an even number of items, then the median is the average of the two middle numbers.

Range: The difference between the greatest number and smallest number is the range. Greatest number (L) = 29

Smallest number
$$(S) = 23$$

$$\therefore$$
 Range = L - S = 29 - 23 = 6

Exercise

1. Find mean, median, mode, and range.

Exercise

- 2. What will be the value of the range if the data is widely spread out?
- 3. Write a set of five data for each of the following.

b) Range = 5

d) Median = 107

- f) Mean = 7 and range = 12
- 4. Use the table given and answer the questions.
 - a) What is the mean grade?
 - b) What will be modal grade of the data?
 - c) Find range of the grades.

Student name	Grade Earned
Jack	20
John	40
Jolly	35
Rose	40
Kelly	55
Kim	68